

Fort Bend Astronomy Club
June 18th, 2010 General Meeting
Minutes

Minutes:

- Began at 7:05pm
 - introduction/introduction of officers/welcome and greeting of new members
 - 2 Visitors and 3 new members

- Novice Presentation: DVD “Cosmic Collisions” narrated by Robert Redford
 - main theme was shaping the cosmic landscape through major collisions
 - The formation of the moon
 - the dynamic and violent nature of the Sun
 - the magnetic field of the Earth
 - Asteroids
 - modern impacts and possibilities of deflection
 - milky way visualization
 - milky way and Andromeda galaxy collision
- ended at 7:34pm

- Discussion of Comet c/2009 R1

- Break at 7:36pm
 - ended at 7:50pm

- Main Presentation: The HR Diagram—By Justin McCollum
 - Hertzsprung and Russell- the men and their lives
 - professions and major discoveries
 - Diagram from 1911-1913
 - Russell
 - first to say most matter in the Universe is Hydrogen
 - H-R Diagram
 - various facts
 - logarithmic chart of the lives of stars
 - surface temperature v. brightness
 - everything presented in terms of our own sun
 - masses from .05 solar mass to 150x solar mass
 - The importance of the HR diagram
 - original was used as a relation between color index (B-V) and luminosity
 - black body curve for maximum output
 - color based on temperature/color indexes/spectral

- radiance/Planck's and Boltzman's laws/Wein's displacement law/perfect blackbody explanation/ UVB photometric system
- Many forms of the HR Diagram
 - luminosity and B-V color index
 - temperature and luminosity
 - OBAFGKMLT
- Relationships with the HR Diagram
 - mass and radius
- Patterns and Stellar stages
 - instability strip of diagram
 - Different variety of variable stars
- Tracking the Sun in the HR (from cradle to grave)
- Tracking various stars in the HR
- Spectral characteristics within the HR
- Stellar Magnitude within the HR
- Other applications of the HR
 - main sequence fitting/spectroscopic parallax/distance modulus
- Physics using the HRD
 - the Eddington Limit
- Ended at 8:35pm
- Q&A

- Door Prize Tickets were handed out

- Business
 - Treasurer: \$3200 in checking, \$2155 in CD, \$793 in ADAY
 - \$400 in expenses to the Astronomical League

 - Speakers: none for August as of yet, July is Leonard Ferguson on Double Stars

 - Promotions: need brochures

 - East Dome: none

 - AOW: none

 - A-team: none

- Club Benefits

- Get together after meeting at 59 Dinner

- No other business

- Door Prizes

- Meeting Adjourned at 9:02pm
-22 People in attendance